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APPLICATION NO.	FILING DATE 02/24/2000	FIRST NAMED INVENTOR Jeffrey L. Huckins	INTL-0270-US-(P7593)	CONFIRMATION NO. 5664 ER
7	7590 01/29/2004		HOYE, MICH	AEL W
Timothy N T Trop Pruner & 8554 Katy Fre Suite 100 Houston, TX	eeway		ART UNIT 2614 DATE MAILED: 01/29/2004	PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/512,226	HUCKINS, JEFFREY L.	
Office Action Summary	Examiner	Art Unit	
	Michael W. Hoye	2614	
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THE MAILING DATE OF THIS CONTINUES. Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reflection of the period for reply is specified above, the maximum statutory perion for reply within the set or extended period for reply will, by stated and the period for reply will be period for reply will be period for reply will be period for reply specified above is less than thirty (30) days, a reply specified above is less than thirty (30) days, a reply specified above is less than thirty (30) days, a reply specified above, the maximum statutory period for reply specified above, the maximum statutory period for reply will, by stated and the period for reply will be period for reply will b	1.136(a). In no event, however reply within the statutory miniming and will apply and will expire SIX	r, may a reply be timely meeting the considered timely. ((6) MONTHS from the mailing date of this communication of the communication	ation.
atus 1) Responsive to communication(s) filed on $\underline{2}$	4 October 2003.		
2a) ☐ This action is FINAL . 2b) ☐ 1 3) ☐ Since this application is in condition for alloclosed in accordance with the practice und	I f form	not matters prosecution as to the men	ts is
isposition of Claims			
4)⊠ Claim(s) <u>1-13 and 26-28</u> is/are pending in	the application.	ation.	
4a) Of the above claim(s) Is/are with	ndrawn from considera		
5) Claim(s) is/are allowed.			
6) Claim(s) <u>1-13 and 26-28</u> is/are rejected.			
- :-/ara abjected to	and/or election require	ment.	
7)☐ Claim(s) is/are objected to: 8)☐ Claim(s) are subject to restriction a	MIU/OI EIECHOITTEGANO		
Application Papers			
9)☐ The specification is objected to by the Exa 10)☒ The drawing(s) filed on 10 March 2003 is/	aminer.	r h) objected to by the Examiner.	
10) ★ The drawing(s) filed on 10 March 2003 is/	alt. a/KN accepted	In abeyance. See 37 CFR 1.85(a).	
Applicant may not request that any objection	0 (10 0.00	on drawing(s) is objected to. See 37 CFR 1	.121(d).
Applicant may not request that any objection of Replacement drawing sheet(s) including the call of the oath or declaration is objected to by the call of the oath or declaration is objected to by the oath or declaration is objected to be objected	Correction is required if the	e attached Office Action or form PTO-	152.
11) ☐ The oath or declaration is objected to by	me Examiner. Note th	→	
Asknowledgment is made of a claim for t	foreign priority under	55 0.5.0. 8 110(0) (0) 5. (7)	
a) All b) Some C) None on 1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the	uments have been recuments have been recomments have been recomments	ceived. ceived in Application No have been received in this National Sta 2(a))	age
application from the international * See the attached detailed Office action for d 13) Acknowledgment is made of a claim for d since a specific reference was included in	or a list of the certified lomestic priority under the first sentence of t	copies not received. 35 U.S.C. § 119(e) (to a provisional a he specification or in an Application Da	polication
37 CFR 1.78. a) ☐ The translation of the foreign langu 14)☐ Acknowledgment is made of a claim for or reference was included in the first senten	age provisional applic domestic priority unde ace of the specification	ation has been received. r 35 U.S.C. §§ 120 and/or 121 since a r or in an Application Data Sheet. 37 C	specific FR 1.78.
Attachment(s)	41	Interview Summary (PTO-413) Paper No(s)	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTC 3) Information Disclosure Statement(s) (PTO-1449) Paper	o-948) 5)	Notice of Informal Patent Application (PTO- Other:	152)
13)1 I information Disclosure Statements	_		aper No. 10

Art Unit: 2614

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on 10/24/03, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
 - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Objections

2. Claim 11 is missing from the Appendix of Claims in the Appeal Brief and should be listed in future correspondence. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Page 3

· Application/Control Number: 09/512,226

Art Unit: 2614

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5-11, 13 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Arsenault et al (EP 0 828 390 A2).

Note the Arsenault et al reference, which discloses a method for a digital broadcast network for providing content description and connection information. The claimed step of transmitting content is met by the ground-based processing and uplink facility 10 as shown in Figure 1 and described in col. 12, line 30 - col. 13, line 8, where various content providers supply content to the processing and transmission facility 10 which includes the main processing equipment 15 for receiving program inputs and generating appropriate output signals 27 for transmission to the satellites 11 by means of an uplink antenna 16, in addition, alternative transmission and broadcasting methods, utilizing other space or ground-based media 13 such as cable, optical fiber, or various wireless systems may also be used. Regarding the claimed "announcement" or "public notification or declaration", the Arsenault et al reference clearly contemplates both public and private networks, as shown by the various networks 13 in Fig. 1 as described above, where an antenna or terrestrial TV network is representative a public network and a cable TV network represents a private network respectively. More specifically, the claimed transmitting a first announcement including connection information for said content is met by map update and control information (which is the "announcement including connection information") that is provided to the processor 15 (Fig. 1) for inclusion in the output signal 27 for transmission to the receiving station(s) 12 (see col. 13, line 36 - col. 14, line 11, specifically col. 14, lines 8-11). The claimed transmitting a second announcement including a content description for said content is met by input data streams 20, which may comprise video

Art Unit: 2614

information, audio information, data services of various types (e.g. multimedia, database services, software delivery, e-mail, etc.), or other information which is desired for transmission to one or more users (e.g. subscribers) as shown in Figure 1 (see col. 13, lines 1-6, also see input 26 and program information 96 in Fig. 7). The receiver(s) or IRD 34 (Fig. 1) receive the upcoming program content of the various service providers, such as program guide (PG) information (col. 25, lines 18-40). The claimed said second announcement transmitted before any assignment of connection has been determined is met by the Arsenault et al reference which clearly teaches that, "two or more input data streams contain...program or content material...such as advance schedules supplied by content providers," and that, "the map generator can respond automatically or in real-time to...input data streams." (see col. 14, lines 12-21 and 27-29) Arsenault specifically teaches receiving advanced schedules transmitted by content providers and then assigning connection information through channel mapping. Moreover, the program guide information is typically updated every 2-4 seconds and is multiplexed into each broadcast frequency and the IRD will receive periodic updates of the program guide information (col. 25, lines 33-40), and local map update information may be broadcast as an appended data stream 95 to the PG information (col. 25, lines 41-49), where dynamic channel mapping through dynamic map control streams may be provided after some program guide information was already received (col. 26, lines 3-11 and 50-55). Therefore, the content description may be transmitted before any assignment of connection has been determined for said content since dynamic local map generation is performed after the content description information is processed.

Art Unit: 2614

As to claim 2, the claimed method of claim 1 including the step of transmitting said first announcement after transmitting the second announcement is met by content and/or schedule information which must me supplied in advance of the connection information (see col. 14, lines 12-21).

As to claim 5, the claimed method of claim 1 further including the step of providing a service identifier with said second announcement to link with said first announcement is met by the program stream including appropriate identifiers with upcoming program content of the various service providers, as well as map service identifiers 98 which link the description to the connection (see Figure 7 & col. 25, lines 20-29, and line 42 - col. 26, line 2). As described above, the program guide information is updated and transmitted frequently approximately every 2-4 seconds (at least with respect to basic information, see col. 25, lines 33-40). The dynamic channel mapping updates usually occur every 15 or 30 minutes (col. 23, lines 38-42). The local map update information may be broadcast in conjunction with the PG information but as an appended data stream or may be in dedicated map packets (col. 25, lines 41-49). The dynamic channel mapping and control data streams (col. 26, lines 3-11 and 50-54), occur only at certain prescribed times after a significant amount of PG information has already been received and used by the IRD(s) and a select signal to control or determine the active map is based on timestamps received as part of the dynamic map control data. Therefore, the timestamp associated with the dynamic map ID may be received after the PG information, which provides dynamic map control information linked to program identifiers and descriptions.

Art Unit: 2614

As to claim 6, the claimed method of claim 5 including the step of specifying the location of service in said connection information is met by the data stream containing information to the appropriate source and it's location (see col. 19, lines 31-36).

As to claim 7, the claimed method of claim 6 further including the step of transmitting ancillary information with said content is met by the data streams comprising video information, audio information, data services of various types, or other information as described in col. 13, lines 1-8.

As to claim 8, the claimed method of claim 2 further including the step of providing an identifier to link said first and second announcements is met by the program identifier in 96 of Fig. 7 and Map Select ID 98 (col. 25, line 18 – col. 26 line 2). See claim 5 for additional support for the rejection of the claim.

As to claim 9, the claimed method of claim 1 wherein the step of transmitting said connection information includes transmitting a data program guide is met by Fig. 7 where the control packets periodically include information 94 concerning upcoming program content of the various service providers, such as program guide (PG) information (see col. 25, lines 26-40).

As to claim 10, the claim is analyzed with respect to claim 1.

As to claim 11, the claim is analyzed with respect to claim 2.

As to claim 13, the claim is analyzed with respect to claim 8.

As to claim 26, the claimed processor is met by processor 15 as shown in Figure 1 (see col. 13, lines 36-50). The claimed transmitter coupled to said processor to transmit a first and second announcement and video content is met by uplink antenna 16 as shown in Figure 1 which transmits the first and second announcements and video content (see col. 12, line 43 – col. 13,

Art Unit: 2614

line 12). Regarding the claimed "announcement" or "public notification or declaration", the Arsenault et al reference clearly contemplates both public and private networks, as shown by the various networks 13 in Fig. 1 as described above, where an antenna or terrestrial TV network is representative a public network and a cable TV network represents a private network respectively. More specifically, the claimed transmitting a first announcement including connection information for said content is met by map update and control information (which is the "announcement including connection information") that is provided to the processor 15 (Fig. 1) for inclusion in the output signal 27 for transmission to the receiving station(s) 12 (see col. 13, line 36 - col. 14, line 11, specifically col. 14, lines 8-11). The claimed transmitting a second announcement including a content description for said content is met by input data streams 20, which may comprise video information, audio information, data services of various types (e.g. multimedia, database services, software delivery, e-mail, etc.), or other information which is desired for transmission to one or more users (e.g. subscribers) as shown in Figure 1 (see col. 13, lines 1-6, also see input 26 and program information 96 in Fig. 7). The receiver(s) or IRD 34 (Fig. 1) receive the upcoming program content of the various service providers, such as program guide (PG) information (col. 25, lines 18-40). The Arsenault et al reference clearly teaches, "a processor-based system comprising storage" as shown by data server/storage 75 in Fig. 3. The claimed, "to store a template (or place holder - as defined in the disclosure on pg. 11, lines 11-12 and pg. 15, line 11) for said first announcement (connection information)," is met by map information that is provided to the data server for storage (col. 17, lines 48-49), and the data server (which comprises the storage/place holder for map information provided) provides the

Art Unit: 2614

necessary (connection/map) information at appropriate times (col. 17, lines 45-55) to the broadcast resources, which meets the claimed before said connection information is available.

As to claim 27, the claimed system of claim 26 wherein said transmitter transmits an identifier that may be used to link said first and second announcements is met by the program identifier in 96 of Fig. 7 and Map Select ID 98 (col. 25, line 18 – col. 26 line 2). See claim 5 for additional support for the rejection of the claim.

As to claim 28, the claimed system of claim 26 wherein said transmitter transmits said second announcement before said first announcement is met by content and/or schedule information which must me supplied in advance of the connection information (see col. 14, lines 12-21).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 3, 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al, in view of Yoshinobu et al (USPN 5,686,954), cited by the examiner.

As to claim 3, the Arsenault et al reference discloses the method of claim 2 including the step of arranging said content with more than one component or item as shown in Figures 4 and 7. However, the Arsenault et al reference does not explicitly disclose arranging said content description with at least two levels of granularity or detail. The Yoshinobu et al reference

Art Unit: 2614

discloses a program information broadcasting method that teaches arranging said content description with at least two levels of granularity, such as a group hierarchy, as shown in Figures 2-4, where the program schedule data contains information on multiple channels, the channels (CHn) contain groups of program information (PG), each program information group has a program ID 51, which contains multiple item IDs 56 (see col. 10, line 25 – col. 11, line 58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Arsenault et al such that it arranges said content description with at least two levels of granularity as taught by Yoshinobu et al. One of ordinary skill in the art would have been lead to make such a modification since it is well known to arrange content descriptions with multiple levels of detail for use in an electronic program guide (EPG).

As to claim 4, the Yoshinobu et al reference as combined with the Arsenault et al reference above further discloses the claimed step of including linking each of said granularity levels to connection information for said granularity as met by at least one kind of items of the program sub information SB is identical with one of the kind of item 55 of the main program information, which serves as a link (see Figures 1C & 2, and col. 11, line 53 – col. 12, line 2). The Yoshinobu reference is disclosed for this claim to provide the teaching that program guide information or content description may include multiple levels of "granularity" or sub-information that is linked to the program schedule data header information, which further provides connection information. It would have been obvious to one of ordinary skill in the art at the time of the invent to have included this feature with the method of Arsenault since "content description" with more than one level of granularity is well known in the art for the

Page 10

Application/Control Number: 09/512,226

Art Unit: 2614

advantage of providing more than just a program title for the program guide description information.

As to claim 12, the Arsenault et al reference discloses the article of claim 11 further storing instructions that cause a processor based system to arrange said content with more than one component or item as shown in the content 96 of Figure 7. However, the Arsenault et al reference does not explicitly disclose to arrange said content description with at least two levels of regularity. Yoshinobu et al discloses the claimed system to arrange said content description with at least two levels of regularity, such as a group hierarchy, as shown in Figures 2-4, where the program schedule data or "content description" contains information on multiple channels, the channels (CHn) contain groups of program information (PG), each program information group has a program ID 51, which contains multiple item IDs 56 (see col. 10, line 25 - col. 11, line 58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the article for storing instructions of Arsenault et al such that it arranges said content description with at least two levels of regularity as taught by Yoshinobu et al. One of ordinary skill in the art would have been lead to make such a modification since it is well known to arrange content descriptions with multiple levels of detail for use in an electronic program guide (EPG).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2614

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

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Art Unit: 2614

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 308-HELP.

Michael W. Hoye January 12, 2004

> JOHN MILLER SUPERVISORY PATENT EXAMINER

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